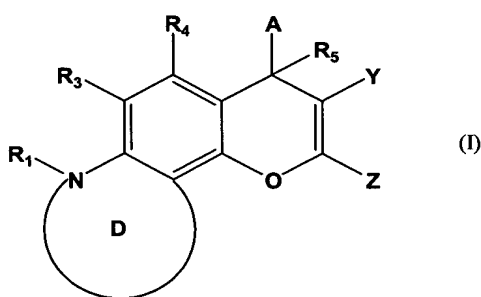


### ***Amendments to the Claims***

This listing of claims will replace all prior versions and listings of claims in the application.

1. (original) A compound of formula I:



wherein,

R<sub>1</sub> is selected from the group consisting of alkyl, cycloalkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl;

R<sub>3</sub> and R<sub>4</sub> are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, C<sub>1-10</sub> alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, carbonylamido or alkylthiol;

R<sub>5</sub> is hydrogen or C<sub>1-10</sub> alkyl;

A is optionally substituted and is aryl, heteroaryl, saturated carbocyclic, partially saturated carbocyclic, saturated heterocyclic, partially saturated heterocyclic or arylalkyl;

D is optionally substituted and is a heteroaromatic, partially saturated heterocyclic or saturated heterocyclic fused ring, wherein said fused ring has 5 or 6 ring atoms, wherein one or two of said ring atoms are nitrogen atoms and the others of said ring atoms are carbon atoms;

Y is CN, COR<sub>19</sub>, CO<sub>2</sub>R<sub>19</sub> or CONR<sub>20</sub>R<sub>21</sub>, wherein R<sub>19</sub>, R<sub>20</sub> and R<sub>21</sub> are independently hydrogen, C<sub>1-10</sub> alkyl, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl or aminoalkyl; or

R<sub>20</sub> and R<sub>21</sub> are taken together with the nitrogen to form a heterocycle; and

Z is NR<sub>22</sub>R<sub>23</sub>, NHCOR<sub>22</sub>N(COR<sub>23</sub>)<sub>2</sub>, N(COR<sub>22</sub>)(COR<sub>23</sub>), N=CHOR<sub>19</sub> or N=CHR<sub>19</sub> wherein R<sub>22</sub> and R<sub>23</sub> are independently H, C<sub>1-4</sub> alkyl or aryl, or R<sub>22</sub> and R<sub>23</sub> are combined together with the group attached to them to form a heterocycle;

or a pharmaceutically acceptable salt or prodrug thereof.

2. (currently amended) The compound of claim 1, wherein R<sub>1</sub> is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and ~~oxiranylalkyl~~ oxiranylalkyl.

3. (original) The compound of claim 2, wherein R<sub>1</sub> is methyl or hydroxymethyl.

4. (original) The compound of claim 1, wherein each of R<sub>3</sub>-R<sub>5</sub> is hydrogen.

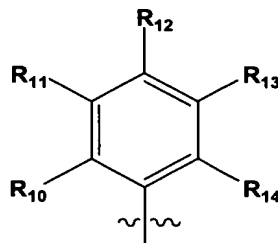
5. (original) The compound of claim 1, wherein Y is cyano.

6. (original) The compound of claim 1, wherein Z is NR<sub>22</sub>R<sub>23</sub>.

7. (original) The compound of claim 6, wherein Z is NH<sub>2</sub>.

8. (original) The compound of claim 1, wherein A is optionally substituted and selected from the group consisting of phenyl, pyridinyl, pyrazinyl, quinoxalinyl, indolyl and thiophenyl.

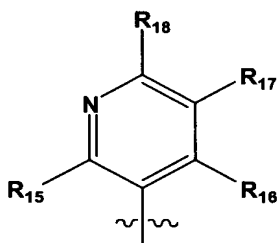
9. (currently amended) The compound of claim 8 wherein A is



and R<sub>10</sub>-R<sub>14</sub> are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, C<sub>1-10</sub> alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, ethylenedioxy, carbonylamido or alkylthiol; or

R<sub>10</sub> and R<sub>11</sub>, or R<sub>11</sub> and R<sub>12</sub>, taken together with the atoms to which they are attached form an aryl, heteroaryl, partially saturated carbocyclic, saturated carbocyclic, partially saturated heterocyclic or saturated heterocyclic group, wherein said group is optionally substituted.

10. (original) The compound of claim 8, wherein A is



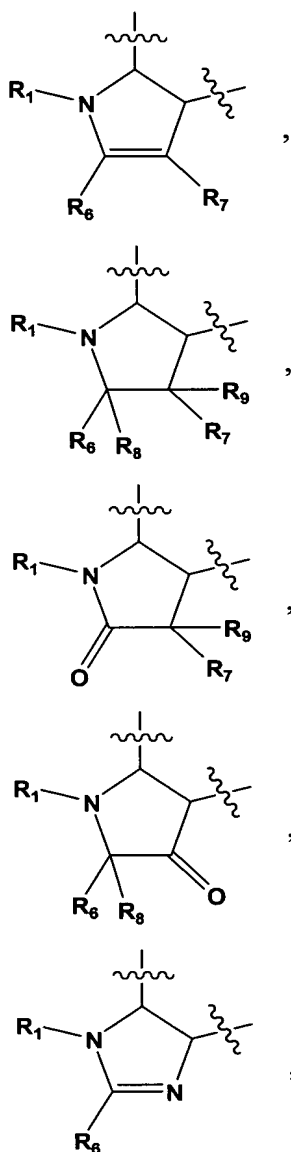
wherein,

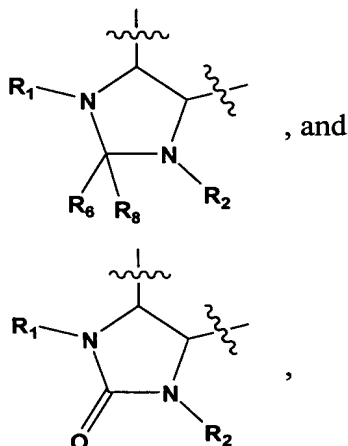
R<sub>15</sub>-R<sub>18</sub> are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, C<sub>1-10</sub> alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro,

amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, ethylenedioxy, carbonylamido or alkylthiol; or

R<sub>16</sub> and R<sub>17</sub>, or R<sub>17</sub> and R<sub>18</sub>, taken together with the atoms to which they are attached form an aryl, heteroaryl, partially saturated carbocyclic, saturated carbocyclic, partially saturated heterocyclic or saturated heterocyclic group, wherein said group is optionally substituted.

11. (currently amended) The compound of claim 1, wherein D is selected from the group consisting of:



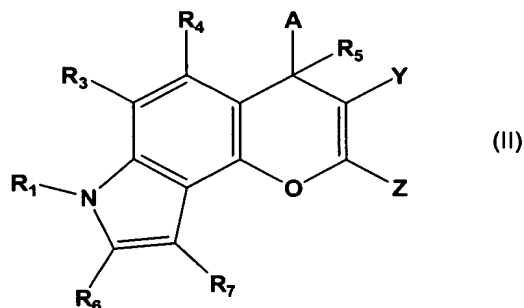


wherein,

$R_2$  is selected from the group ~~consisting of~~ is hydrogen consisting of hydrogen, alkyl, haloalkyl, aryl, carbocyclic, a heterocyclic group, a heteroaryl group, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl ~~or~~ and aminoalkyl; and

each of  $R_6$ - $R_9$  is independently selected from the group consisting of hydrogen, halo, haloalkyl, aryl, carbocyclic, a heterocyclic group, a heteroaryl group,  $C_{1-10}$  alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, carbonylamido and alkylthiol.

12. (original) The compound of claim 11, wherein said compound is of Formula II:



13. (original) The compound of claim 12, wherein A is optionally substituted and selected from the group consisting of phenyl, pyridinyl, pyrazinyl, quinoxaliny, indolyl and thiophenyl.

14. (original) The compound of claim 12, wherein R<sub>1</sub> is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl.

15. (original) The compound of claim 14, wherein R<sub>1</sub> is methyl or hydroxymethyl.

16. (original) The compound of claim 12, wherein each of R<sub>3</sub>-R<sub>7</sub> is hydrogen.

17. (original) The compound of claim 12, wherein Y is cyano.

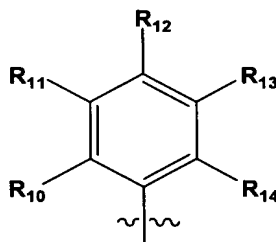
18. (original) The compound of claim 12, wherein Z is NR<sub>22</sub>R<sub>23</sub>.

19. (original) The compound of claim 18, wherein Z is NH<sub>2</sub>.

20. (original) The compound of claim 13, selected from the group consisting of:

2-Amino-3-cyano-7-methyl-4-(6-methyl-pyrazin-2-yl)-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-7-methyl-4-(quinoxalin-2-yl)-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(indol-3-yl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene; and  
2-Amino-4-(5-nitro-thiophene-2-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
or a pharmaceutically acceptable salt or prodrug thereof.

21. (original) The compound of claim 13, wherein A is



wherein:

R<sub>10</sub>-R<sub>14</sub> are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, C<sub>1-10</sub> alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, ethylenedioxy, carbonylamido or alkylthiol; or

R<sub>10</sub> and R<sub>11</sub>, or R<sub>11</sub> and R<sub>12</sub>, taken together with the atoms to which they are attached form an aryl, heteroaryl, partially saturated carbocyclic, saturated carbocyclic, partially saturated heterocyclic or saturated heterocyclic group wherein said group is optionally substituted.

22. (original) The compound of claim 21, wherein:

R<sub>1</sub> is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl;

each of R<sub>3</sub>, R<sub>4</sub>, R<sub>6</sub> and R<sub>7</sub> is hydrogen or methyl;

each of R<sub>10</sub>-R<sub>14</sub> is independently selected from the group consisting of hydrogen, hydroxy, halogen, cyano, alkoxy and acetoxy or combines with another of R<sub>10</sub>-R<sub>14</sub> to form methylenedioxy or ethylenedioxy;

Y is cyano; and

Z is NR<sub>22</sub>R<sub>23</sub>, wherein R<sub>22</sub> and R<sub>23</sub> are independently H or C<sub>1-4</sub> alkyl.

23. (currently amended) The compound of claim 22, wherein said compound is selected from the group consisting of:

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-ethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-cyclopropylmethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-(2-diethylamino-ethyl)-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-hydroxymethyl-4*H*-pyrrolo[2,3-*h*]chromene;

~~Amino-4-(3-bromo-4-hydroxy-5-methoxyphenyl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;~~

2-Amino-4-(3-bromo-4-hydroxy-5-methoxyphenyl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-oxiranylmethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(4-acetoxy-3-bromo-5-methoxyphenyl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4,5-trimethoxyphenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;



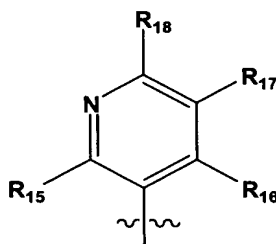
2-Amino-3-cyano-4-(3-nitrophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3,5-dimethoxyphenyl)-7-methyl-4*H*-  
pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3,4-methylenedioxy-5-methoxyphenyl)-7-methyl-4*H*-  
pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3-methoxyphenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3-bromophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3,5-difluorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(4,5-dimethoxy-3-iodophenyl)-7-methyl-4*H*-  
pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3-cyanophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3,4,5-trimethoxyphenyl)-7-hydroxymethyl-4*H*-  
pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3,5-dimethoxyphenyl)-7-hydroxymethyl-4*H*-  
pyrrolo[2,3-*h*]chromene;  
4,7,10,13,16,19-Docosahexaenoic acid {2-Amino-4-(3-bromo-4,5-  
dimethoxyphenyl)-3-cyano-4*H*-pyrrolo[2,3-*h*]chromene}-7-ylmethyl ester;  
2-Amino-3-cyano-4-(3-fluorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(4-cyanophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3-chlorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3,5-dichlorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3,4-dichlorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3-bromo-4,5-dimethoxyphenyl)-7,9-dimethyl-4*H*-  
pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3,4-difluorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3-fluoro-4-chlorophenyl)-7-methyl-4*H*-  
pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3-bromo-4-fluorophenyl)-7-methyl-4*H*-  
pyrrolo[2,3-*h*]chromene;  
2-Amino-3-cyano-4-(3-cyano-4-fluorophenyl)-7-methyl-4*H*-  
pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-dichloro-phenyl)-7-isopropyl-4*H*-pyrrolo[2,3-*h*]chromene; and

2-Amino-3-cyano-4-(3-bromo-4,5-dimethoxy-phenyl)-7-isopropyl-4*H*-pyrrolo[2,3-*h*]chromene;

or a pharmaceutically acceptable salt or prodrug thereof.

24. (currently amended) The compound of claim 14, wherein A is



wherein,

R<sub>15</sub>-R<sub>18</sub> are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, C<sub>1-10</sub> alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, ethylenedioxy, carbonylamido or alkylthiol; or

R<sub>16</sub> and R<sub>17</sub>, or R<sub>17</sub> and R<sub>18</sub>, taken together with the atoms to which they are attached form an aryl, heteroaryl, partially saturated carbocyclic, saturated carbocyclic, partially saturated heterocyclic or saturated heterocyclic group, wherein said group is optionally substituted.

25. (currently amended) The compound of claim 24, wherein:

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R<sub>1</sub> is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl;

each of R<sub>3</sub>, R<sub>4</sub>, R<sub>6</sub> and R<sub>7</sub> is independently hydrogen or methyl;

each of R<sub>15</sub>-R<sub>18</sub> is independently selected from the group consisting of hydrogen, hydroxy, halogen, cyano, alkoxy and acetoxy or combines with another of R<sub>16</sub>-R<sub>18</sub> to form methylenedioxy or ethylenedioxy;

Y is cyano; and

Z is NR<sub>22</sub>R<sub>23</sub>, wherein R<sub>22</sub> and R<sub>23</sub> are independently H or C<sub>1-4</sub> alkyl.

26. (original) The compound of claim 25, wherein said compound is selected from the group consisting of:

2-Amino-4-(5-cyano-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-chloro-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-chloro-6-hydroxy-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-bromo-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-7-hydroxymethyl-4*H*-pyrrolo[2,3-*h*]chromene;

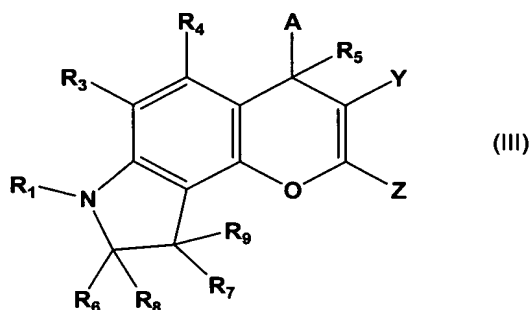
2-Amino-4-(5-bromo-pyridin-3-yl)-3-cyano-7-hydroxymethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(5-methoxy-pyridin-3-yl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene; and

4,7,10,13,16,19-Docosahexaenoic acid {2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-4*H*-pyrrolo[2,3-*h*]chromene}-7-ylmethyl ester;

or a pharmaceutically acceptable salt or prodrug thereof.

27. (original) The compound of claim 11, wherein said compound is of Formula III:



28. (original) The compound of claim 27, wherein A is optionally substituted and selected from the group consisting of phenyl, pyridinyl, pyrazinyl, quinoxaliny, indolyl and thiophenyl.

29. (original) The compound of claim 27, wherein R<sub>1</sub> is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl.

30. (original) The compound of claim 29, wherein R<sub>1</sub> is methyl or hydroxymethyl.

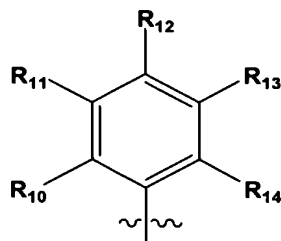
31. (original) The compound of claim 27, wherein each of R<sub>3</sub>-R<sub>9</sub> is hydrogen.

32. (original) The compound of claim 27, wherein Y is cyano.

33. (original) The compound of claim 27, wherein Z is NR<sub>22</sub>R<sub>23</sub>.

34. (original) The compound of claim 33, wherein Z is NH<sub>2</sub>.

35. (currently amended) The compound of claim 28, wherein A is:



wherein:  $R_{10}$ - $R_{14}$  are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group,  $C_{1-10}$  alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, ethylenedioxy, carbonylamido or alkylthiol; or  $R_{10}$  and  $R_{11}$ , or  $R_{11}$  and  $R_{12}$ , taken together with the atoms to which they are attached form an aryl, heteroaryl, optionally substituted carbocyclic or optionally substituted heterocyclic group, wherein said group is optionally substituted.

36. (original) The compound of claim 35, wherein:

$R_1$  is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, alkoxy, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl;

each of  $R_3$ ,  $R_4$ , and  $R_6$ - $R_9$  independently is hydrogen or methyl;

each of  $R_{10}$ - $R_{14}$  is independently selected from the group consisting of hydrogen, hydroxy, halogen, cyano, alkoxy and acetoxy or combines with another of  $R_{10}$ - $R_{14}$  to form methylenedioxy or ethylenedioxy;

Y is cyano; and

Z is  $NR_{22}R_{23}$ , wherein  $R_{22}$  and  $R_{23}$  are independently H or  $C_{1-4}$  alkyl.

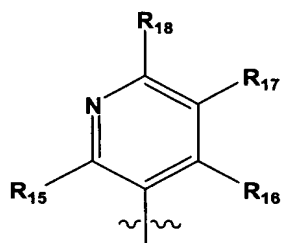
37. (currently amended) The compound of claim 36, selected from the group consisting of:

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-8,9-dihydro-7-methyl-4H-pyrrolo[2,3-*h*]chromene; and

2-Amino-4-(3,5-difluorophenyl)-3-cyano-8,9-dihydro-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;[[;]]

or a pharmaceutically acceptable salt or prodrug thereof.

38. (original) The compound of claim 28, wherein A is:



wherein,

R<sub>15</sub>-R<sub>18</sub> are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, C<sub>1-10</sub> alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, ethylenedioxy, carbonylamido or alkylthiol; or

R<sub>16</sub> and R<sub>17</sub>, or R<sub>17</sub> and R<sub>18</sub>, taken together with the atoms to which they are attached form an aryl, heteroaryl, partially saturated carbocyclic, saturated carbocyclic, partially saturated heterocyclic or saturated heterocyclic group, wherein said group is optionally substituted.

39. (original) The compound of claim 38, wherein:

R<sub>1</sub> is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl;

each of R<sub>3</sub>, R<sub>4</sub>, and R<sub>6</sub>-R<sub>9</sub> is independently hydrogen or methyl;

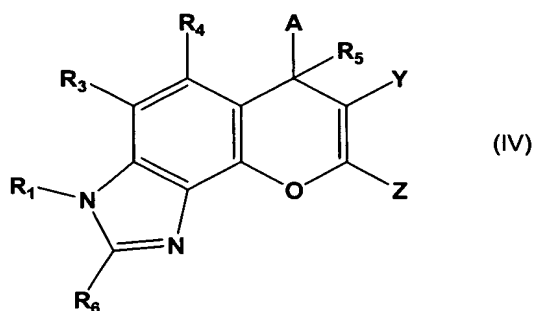
each of R<sub>15</sub>-R<sub>18</sub> is independently selected from the group consisting of hydrogen, hydroxy, halogen, cyano, alkoxy and acetoxy or combines with another of R<sub>16</sub>-R<sub>18</sub> to form methylenedioxy or ethylenedioxy;

Y is cyano; and

Z is  $\text{NR}_{22}\text{R}_{23}$ , wherein  $\text{R}_{22}$  and  $\text{R}_{23}$  are independently H or  $\text{C}_{1-4}$  alkyl.

40. (original) The compound of claim 39, which is 2-amino-4-(5-methyl-pyridin-3-yl)-3-cyano-7-methyl-8,9-dihydro-4*H*-pyrrolo[2,3-*h*]chromene, or a pharmaceutically acceptable salt or prodrug thereof.

41. (original) The compound of claim 11, wherein said compound is of Formula IV:



42. (original) The compound of claim 41, wherein A is optionally substituted and selected from the group consisting of phenyl, pyridinyl, pyrazinyl, quinoxaliny, indolyl and thiophenyl.

43. (original) The compound of claim 41, wherein  $\text{R}_1$  is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl.

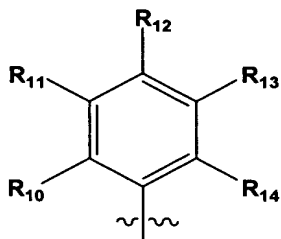
44. (original) The compound of claim 43, wherein  $\text{R}_1$  is methyl or hydroxymethyl.

45. (original) The compound of claim 41, wherein Y is cyano.

46. (original) The compound of claim 41, wherein Z is  $\text{NR}_{22}\text{R}_{23}$ .

47. (original) The compound of claim 46, wherein Z is NH<sub>2</sub>.

48. (currently amended) The compound of claim 42, wherein A is



wherein: R<sub>10</sub>-R<sub>14</sub> are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, C<sub>1-10</sub> alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, ethylenedioxy, carbonylamido or alkylthiol; or R<sub>10</sub> and R<sub>11</sub>, or R<sub>11</sub> and R<sub>12</sub>, taken together with the atoms to which they are attached form an aryl, heteroaryl, optionally substituted carbocyclic or optionally substituted heterocyclic group, wherein said group is optionally substituted.

49. (original) The compound of claim 48, wherein:

R<sub>1</sub> is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl;

each of R<sub>3</sub>, R<sub>4</sub>, and R<sub>6</sub> is independently hydrogen or methyl;

each of R<sub>10</sub>-R<sub>14</sub> is independently selected from the group consisting of hydrogen, hydroxy, halogen, cyano, alkoxy and acetoxy or combines with another of R<sub>10</sub>-R<sub>14</sub> to form methylenedioxy or ethylenedioxy;

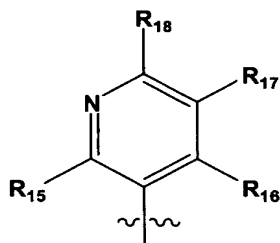
Y is cyano; and

Z is NR<sub>22</sub>R<sub>23</sub>, wherein R<sub>22</sub> and R<sub>23</sub> are independently H or C<sub>1-4</sub> alkyl.



50. (original) The compound of claim 49, which is 2-amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-methyl-4*H*-imidazo[4,5-*h*]chromene;  
or a pharmaceutically acceptable salt or prodrug thereof.

51. (original) The compound of claim 42, wherein A is



and R<sub>15</sub>-R<sub>18</sub> are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, C<sub>1-10</sub> alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, ethylenedioxy, carbonylamido or alkylthiol; or

R<sub>16</sub> and R<sub>17</sub>, or R<sub>17</sub> and R<sub>18</sub>, taken together with the atoms to which they are attached form an aryl, heteroaryl, partially saturated carbocyclic, saturated carbocyclic, partially saturated heterocyclic or saturated heterocyclic group, wherein said group is optionally substituted.

52. (original) The compound of claim 51, wherein:

R<sub>1</sub> is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl;

each of R<sub>3</sub>, R<sub>4</sub> and R<sub>6</sub> is independently hydrogen or methyl;

each of R<sub>15</sub>-R<sub>18</sub> is independently selected from the group consisting of hydrogen, hydroxy, halogen, cyano, alkoxy and acetoxy or combines with another of R<sub>15</sub>-R<sub>18</sub> to form methylenedioxy or ethylenedioxy;

Y is cyano; and

Z is NR<sub>22</sub>R<sub>23</sub>, wherein R<sub>22</sub> and R<sub>23</sub> are independently H or C<sub>1-4</sub> alkyl.

53. (original) The compound of claim 52, selected from the group consisting of:

2-Amino-4-(5-bromo-pyridin-3-yl)-3-cyano-7-methyl-4*H*-imidazo[4,5-*h*]chromene; and

2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-7-methyl-4*H*-imidazo[4,5-*h*]chromene;

or a pharmaceutically acceptable salt or prodrug thereof.

54. (original) A pharmaceutical composition comprising the compound of claim 1, or a pharmaceutically acceptable salt or prodrug thereof, and a pharmaceutically acceptable excipient or carrier.

55. (original) The pharmaceutical composition of claim 54, further comprising at least one known cancer chemotherapeutic agent, or a pharmaceutically acceptable salt of said agent.

56. (currently amended) The pharmaceutical composition of claim 55, wherein said known cancer chemotherapeutic agent is selected from the group consisting of busulfan, cis-platin, mitomycin C, carboplatin, colchicine, vinblastine, paclitaxel, docetaxel, camptothecin, topotecan, doxorubicin, etoposide, 5-azacytidine, 5-fluorouracil, methotrexate, 5-fluoro-2'-deoxy-uridine, ara-C, hydroxyurea, thioguanine, melphalan, chlorambucil, cyclophosphamide, ifosfamide, vincristine, mitoguanzone, epirubicin, aclarubicin, bleomycin, mitoxantrone, elliptinium, fludarabine, octreotide, retinoic acid, tamoxifen, ~~Herceptin®~~, ~~Rituxan®~~ Herceptin®, Rituxan® and alanosine.

57. (original) The pharmaceutical composition of claim 54, wherein said excipient or carrier is selected from the group consisting of saccharides, starch pastes, gelatin, tragacanth, cellulose preparations, calcium phosphates and polyvinyl pyrrolidone.

58. (currently amended) The pharmaceutical composition of claim 57, wherein said excipient or carrier is a saccharide selected from the group consisting of lactose, sucrose, ~~manitol~~ mannitol and sorbitol.

59. (original) The pharmaceutical composition of claim 54, wherein said excipient or carrier is a lipophilic solvent.

60. (original) The pharmaceutical composition of claim 59, wherein said lipophilic solvent is selected from the group consisting of fatty oils, fatty acid esters, polyethylene glycols and paraffin hydrocarbons.

61. (original) The pharmaceutical composition of claim 59, wherein said lipophilic solvent is selected from the group consisting of sesame oil, ethyl oleate, triglycerides, polyethylene glycol-400, cremophor and cyclodextrins.

62. (original) The pharmaceutical composition of claim 54, wherein said excipient or carrier is selected from the group consisting of vegetable oils, mineral oils, white petrolatum, branched chain fats, branched chain oils, animal fats and high molecular weight alcohol (greater than C<sub>12</sub>).

63. (original) The pharmaceutical composition of claim 54, wherein said excipient or carrier is a saline solution.

64. (currently amended) The pharmaceutical composition of claim 54, wherein said compound is selected from the group consisting of:

2-Amino-4-(5-cyano-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-7-methyl-4-(6-methyl-pyrazin-2-yl)-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-7-methyl-4-(quinoxalin-2-yl)-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-ethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-cyclopropylmethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-(2-diethylamino-ethyl)-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-chloro-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(indol-3-yl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-chloro-6-hydroxy-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-bromo-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-methyl-4*H*-imidazo[4,5-*h*]chromene;

2-Amino-4-(5-bromo-pyridin-3-yl)-3-cyano-7-methyl-4*H*-imidazo[4,5-*h*]chromene;

2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-7-methyl-4*H*-imidazo[4,5-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-hydroxymethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4-hydroxy-5-methoxyphenyl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-oxiranylmethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-7-hydroxymethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-bromo-pyridin-3-yl)-3-cyano-7-hydroxymethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(4-acetoxy-3-bromo-5-methoxyphenyl)-3-cyano-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-8,9-dihydro-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4,5-trimethoxyphenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-nitrophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-dimethoxyphenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4-methylenedioxy-5-methoxyphenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-methoxyphenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-bromophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-difluorophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(4,5-dimethoxy-3-iodophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-cyanophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4,5-trimethoxyphenyl)-7-hydroxymethyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-dimethoxyphenyl)-7-hydroxymethyl-4H-pyrrolo[2,3-*h*]chromene;

~~2-Amino-3-cyano-4-(3,5-difluorophenyl)-8,9-dihydro-7-methyl-4H-pyrrolo[2,3-*h*]chromene;~~

2-Amino-3-cyano-4-(3,5-difluorophenyl)-8,9-dihydro-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-methyl-pyridin-3-yl)-3-cyano-7-methyl-8,9-dihydro-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-nitro-thiophene-2-yl)-3-cyano-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

4,7,10,13,16,19-Docosahexaenoic acid {2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-4H-pyrrolo[2,3-*h*]chromene}-7-ylmethyl ester;

4,7,10,13,16,19-Docosahexaenoic acid {2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl) -4*H*-pyrrolo[2,3-*h*]chromene}-7-ylmethyl ester;

2-Amino-3-cyano-4-(3-fluorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(4-cyanophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-chlorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-dichlorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4-dichlorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-bromo-4,5-dimethoxyphenyl)-7,9-dimethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4-difluorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-fluoro-4-chlorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-bromo-4-fluorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene; and

2-Amino-3-cyano-4-(3-cyano-4-fluorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

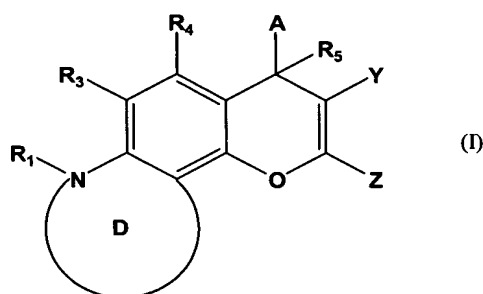
2-Amino-3-cyano-4-(5-methoxy-pyridin-3-yl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-dichloro-phenyl)-7-isopropyl-4*H*-pyrrolo[2,3-*h*]chromene; and

2-Amino-3-cyano-4-(3-bromo-4,5-dimethoxy-phenyl)-7-isopropyl-4*H*-pyrrolo[2,3-*h*]chromene;

or a pharmaceutically acceptable salt or prodrug thereof.

65. (currently amended) A method of treating a disorder responsive to the induction of apoptosis in an animal suffering therefrom, comprising administering to a mammal in need of such treatment an effective amount of a compound of Formula I:



wherein,

$R_1$  is selected from the group consisting of alkyl, cycloalkyl, cycloalkylalkyl, hydroxyalkyl, haloalkyl, alkoxyalkyl, aminoalkyl and oxiranylalkyl;

$R_3$  and  $R_4$  are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group,  $C_{1-10}$  alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, carbonylamido or alkylthiol;

$R_5$  is hydrogen or  $C_{1-10}$  alkyl;

A is optionally substituted and is aryl, heteroaryl, saturated carbocyclic, partially saturated carbocyclic, saturated heterocyclic, partially saturated heterocyclic or arylalkyl;

D is optionally substituted and is a heteroaromatic, partially saturated heterocyclic or saturated heterocyclic fused ring, wherein said fused ring has 5 or 6 ring

atoms, wherein one or two of said ring atoms are nitrogen atoms and the others of said ring atoms are carbon atoms;

Y is CN, COR<sub>19</sub>, CO<sub>2</sub>R<sub>19</sub> or CONR<sub>20</sub>R<sub>21</sub>, wherein R<sub>19</sub>, R<sub>20</sub> and R<sub>21</sub> are independently hydrogen, C<sub>1-10</sub> alkyl, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl or aminoalkyl; or

R<sub>20</sub> and R<sub>21</sub> are taken together with the nitrogen to form a heterocycle; and

Z is NR<sub>22</sub>R<sub>23</sub>, NHCOR<sub>22</sub>N(COR<sub>23</sub>)<sub>2</sub>, N(COR<sub>22</sub>)(COR<sub>23</sub>), N=CHOR<sub>19</sub> or N=CHR<sub>19</sub> wherein R<sub>22</sub> and R<sub>23</sub> are independently H, C<sub>1-4</sub> alkyl or aryl, or R<sub>22</sub> and R<sub>23</sub> are combined together with the group attached to them to form a heterocycle;

or a pharmaceutically acceptable salt or prodrug thereof.

66. (original) The method of claim 65, wherein R<sub>1</sub> is selected from the group consisting of alkyl, cycloalkylalkyl, hydroxyalkyl, alkoxy, aminoalkyl and oxiranylalkyl.

67. (original) The method of claim 66, wherein R<sub>1</sub> is methyl or hydroxymethyl.

68. (original) The method of claim 65, wherein each of R<sub>3</sub>-R<sub>5</sub> is hydrogen.

69. (original) The method of claim 65, wherein Y is cyano.

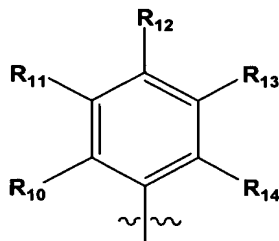
70. (original) The method of claim 65, wherein Z is NR<sub>22</sub>R<sub>23</sub>.

71. (original) The method of claim 70, wherein Z is NH<sub>2</sub>.



72. (currently amended) The ~~compound~~ method of claim 65, wherein A is optionally substituted and selected from the group consisting of phenyl, pyridinyl, pyrazinyl, quinoxaliny, indolyl and thiophenyl.

73. (original) The method of claim 72, wherein A is

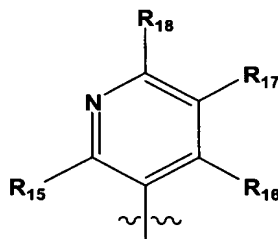


wherein,

R<sub>10</sub>-R<sub>14</sub> are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, C<sub>1-10</sub> alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, ethylenedioxy, carbonylamido or alkylthiol; or

R<sub>10</sub> and R<sub>11</sub>, or R<sub>11</sub> and R<sub>12</sub>, taken together with the atoms to which they are attached form an aryl, heteroaryl, partially saturated carbocyclic, saturated carbocyclic, partially saturated heterocyclic or saturated heterocyclic group, wherein said group is optionally substituted.

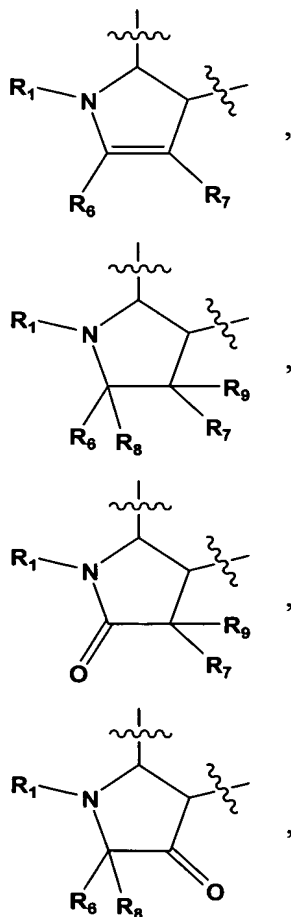
74. (original) The method of claim 72, wherein A is

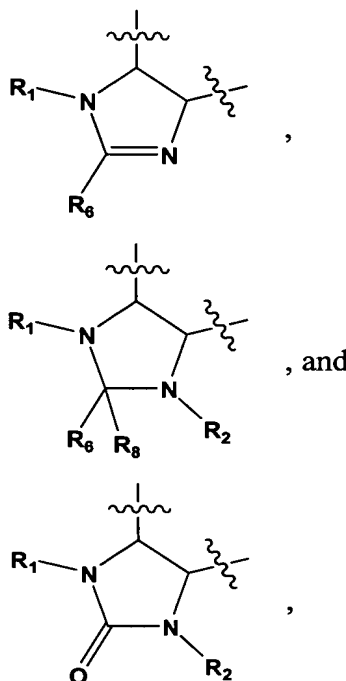


and R<sub>15</sub>-R<sub>18</sub> are independently hydrogen, halo, haloalkyl, aryl, fused aryl, carbocyclic, a heterocyclic group, a heteroaryl group, C<sub>1-10</sub> alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, ethylenedioxy, carbonylamido or alkylthiol; or

R<sub>16</sub> and R<sub>17</sub>, or R<sub>17</sub> and R<sub>18</sub>, taken together with the atoms to which they are attached form an aryl, heteroaryl, partially saturated carbocyclic, saturated carbocyclic, partially saturated heterocyclic or saturated heterocyclic, wherein said group is optionally substituted.

75. (currently amended) The method of claim 65, wherein D is selected from the group consisting of:



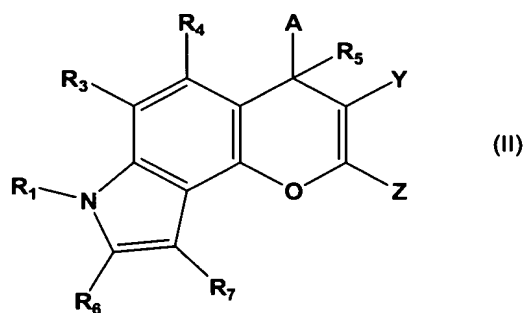


wherein,

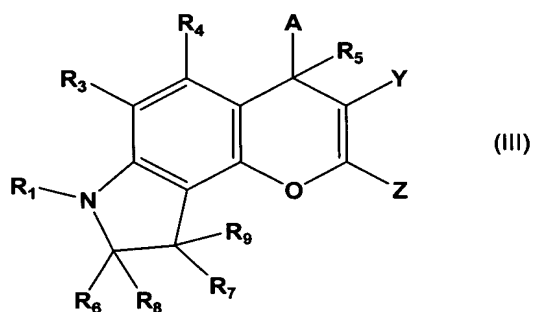
$R_2$  is selected from the group ~~consisting of is hydrogen~~ consisting of hydrogen,  $C_{1-10}$  alkyl, haloalkyl, aryl, carbocyclic, a heterocyclic group, a heteroaryl group, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl ~~or~~ and aminoalkyl; and

each of  $R_6$ - $R_9$  is independently selected from the group consisting of hydrogen, halo, haloalkyl, aryl, carbocyclic, a heterocyclic group, a heteroaryl group,  $C_{1-10}$  alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, carbonylamido and alkylthiol.

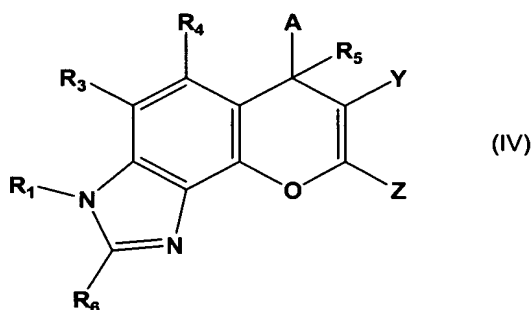
76. (original) The method of claim 75, wherein said compound is of Formula II:



77. (original) The method of claim 75, wherein said compound is of Formula III:



78. (original) The method of claim 75, wherein said compound is of Formula IV:



79. (currently amended) The method of claim 65, wherein said compound is selected from the group consisting of:

2-Amino-4-(5-cyano-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-7-methyl-4-(6-methyl-pyrazin-2-yl)-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-7-methyl-4-(quinoxalin-2-yl)-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-ethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-cyclopropylmethyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-(2-diethylamino-ethyl)-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-chloro-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(indol-3-yl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-chloro-6-hydroxy-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-bromo-pyridin-3-yl)-3-cyano-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-methyl-4H-imidazo[4,5-*h*]chromene;

2-Amino-4-(5-bromo-pyridin-3-yl)-3-cyano-7-methyl-4H-imidazo[4,5-*h*]chromene;

2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-7-methyl-4H-imidazo[4,5-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-hydroxymethyl-4H-pyrrolo[2,3-*h*]chromene;

Amino-4-(3-bromo-4-hydroxy-5-methoxyphenyl)-3-cyano-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-7-oxiranylmethyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-7-hydroxymethyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-bromo-pyridin-3-yl)-3-cyano-7-hydroxymethyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(4-acetoxy-3-bromo-5-methoxyphenyl)-3-cyano-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-8,9-dihydro-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4,5-trimethoxyphenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-nitrophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-dimethoxyphenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4-methylenedioxy-5-methoxyphenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-methoxyphenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-bromophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-difluorophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(4,5-dimethoxy-3-iodophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-cyanophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4,5-trimethoxyphenyl)-7-hydroxymethyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-dimethoxyphenyl)-7-hydroxymethyl-4H-pyrrolo[2,3-*h*]chromene;

~~2-Amino-3-cyano-4-(3,5-difluorophenyl)-8,9-dihydro-7-methyl-4H-pyrrolo[2,3-*h*]chromene;~~

2-Amino-3-cyano-4-(3,5-difluorophenyl)-8,9-dihydro-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-methyl-pyridin-3-yl)-3-cyano-7-methyl-8,9-dihydro-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-4-(5-nitro-thiophene-2-yl)-3-cyano-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

4,7,10,13,16,19-Docosahexaenoic acid {2-Amino-4-(3-bromo-4,5-dimethoxyphenyl)-3-cyano-4H-pyrrolo[2,3-*h*]chromene}-7-ylmethyl ester;

4,7,10,13,16,19-Docosahexaenoic acid {2-Amino-3-cyano-4-(5-methyl-pyridin-3-yl)-4H-pyrrolo[2,3-*h*]chromene}-7-ylmethyl ester;

2-Amino-3-cyano-4-(3-fluorophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(4-cyanophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-chlorophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-dichlorophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4-dichlorophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-bromo-4,5-dimethoxyphenyl)-7,9-dimethyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,4-difluorophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-fluoro-4-chlorophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-bromo-4-fluorophenyl)-7-methyl-4H-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3-cyano-4-fluorophenyl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(5-methoxy-pyridin-3-yl)-7-methyl-4*H*-pyrrolo[2,3-*h*]chromene;

2-Amino-3-cyano-4-(3,5-dichloro-phenyl)-7-isopropyl-4*H*-pyrrolo[2,3-*h*]chromene; and

2-Amino-3-cyano-4-(3-bromo-4,5-dimethoxy-phenyl)-7-isopropyl-4*H*-pyrrolo[2,3-*h*]chromene;

or a pharmaceutically acceptable salt or prodrug thereof.

80. (original) The method of claim 65, wherein said disorder is cancer.

81. (original) The method of claim 80, wherein said cancer is selected from the group consisting of Hodgkin's disease, non-Hodgkin's lymphoma, acute and chronic lymphocytic leukemias, multiple myeloma, neuroblastoma, breast carcinoma, ovarian carcinoma, lung carcinoma, Wilms' tumor, cervical carcinoma, testicular carcinoma, soft-tissue sarcoma, chronic lymphocytic leukemia, primary macroglobulinemia, bladder carcinoma, chronic granulocytic leukemia, primary brain carcinoma, malignant melanoma, small-cell lung carcinoma, stomach carcinoma, colon carcinoma, malignant pancreatic insulinoma, malignant carcinoid carcinoma, malignant melanoma, choriocarcinoma, mycosis fungoides, head and neck carcinoma, osteogenic sarcoma, pancreatic carcinoma, acute granulocytic leukemia, hairy cell leukemia, neuroblastoma, rhabdomyosarcoma, Kaposi's sarcoma, genitourinary carcinoma, thyroid carcinoma, esophageal carcinoma, malignant hypercalcemia, cervical hyperplasia, renal cell carcinoma, endometrial carcinoma, polycythemia vera, essential thrombocytosis, adrenal cortex carcinoma, skin cancer and prostatic carcinoma.

82. (original) The method of claim 81, wherein said cancer is a drug resistant cancer.



83. (original) The method of claim 80, additionally comprising administering at least one known cancer chemotherapeutic agent, or a pharmaceutically acceptable salt of said agent.

84. (currently amended) The method of claim 83, wherein said known cancer therapeutic agent is selected from the group consisting of busulfan, cis-platin, mitomycin C, carboplatin, colchicine, vinblastine, paclitaxel, docetaxel, camptothecin, topotecan, doxorubicin, etoposide, 5-azacytidine, 5-fluorouracil, methotrexate, 5-fluoro-2'-deoxy-uridine, ara-C, hydroxyurea, thioguanine, melphalan, chlorambucil, cyclophosphamide, ifosfamide, vincristine, mitoguanzone, epirubicin, aclarubicin, bleomycin, mitoxantrone, elliptinium, fludarabine, octreotide, retinoic acid, tamoxifen, ~~Hereceptin®~~, ~~Rituxan®~~ Herceptin®, Rituxan® and alanosine.

85. (original) The method of claim 80, additionally comprising treating with radiation-therapy.

86. (original) The method of claim 80, wherein said compound is administered after surgical treatment for cancer.

87. (original) The method of claim 65, wherein said disorder is an autoimmune disease.

88. (original) The method of claim 65, wherein said disorder is rheumatoid arthritis.

89. (original) The method of claim 65, wherein said disorder is inflammation.

90. (original) The method of claim 89, wherein said inflammation is inflammatory bowel disease.

91. (original) The method of claim 65, wherein said disorder is a skin disease.

92. (original) The method of claim 91, wherein said disorder is psoriasis.